

**REMARKS**Regarding the Rejections under 35 U.S.C. §102(b):

35 U.S.C. 102(b) states that “[a] person shall be entitled to a patent unless ... the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.”

Claims 1, 10, 13 – 47 stand rejected under 102(b) over Treacy et al. (US 6,342,578). This rejection is in error, because the present application was filed on April 4, 2002, whereas the cited reference was published on January 29, 2002. 35 U.S.C. §102(b) does not apply because the invention was not patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States. A discussion of the novelty of the present invention over Treacy et al. was presented in the Appeal Brief filed November 15, 2006.

Claims 1 – 10, 13 – 47 stand rejected under 102(b) over Takagi et al. (US 5,543,573). Anticipation under 35 U.S.C. §102 can be found only if a reference shows exactly what is claimed.<sup>1</sup> The test for anticipation is one of identity which means that the identical invention must be shown in the reference in as complete detail as is contained in the claim.<sup>2</sup>

Takagi et al. discloses the use of a broad range of hydrazinecarboxamides of formula I against various insect pests (see column 62, lines 6 to 67). The reference includes a statement that “[t]he insecticides are markedly effective particularly against insect pests belonging to LEPIDOPTERA, and COLEOPTERA and the like.”<sup>3</sup> Thus, this reference fails to show exactly what is claimed.

Claim 1 is directed to a method for controlling a pest selected from the Isoptera, Hymenoptera, Orthoptera and Psocoptera orders.

<sup>1</sup> Cf. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985); *In re Marshall* 577 F.2d 301, 198 USPQ 344 (CCPA 1978); *In re Kalm* 378 F.2d 959, 154 USPQ 10 (CCPA 1967).

<sup>2</sup> Cf. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989).

<sup>3</sup> Column 62, line 67 to column 63, line 2 of US 5,543,573.

- Claim 15 is directed to a method for protecting against a pest selected from the Rhinotermitidae, Termitidae, Kalotermitidae and Termopsidae families.
- Claim 16 is directed to a method for controlling a pest from the Formicidae family in crops.

Takagi et al.'s statement that "[t]he insecticides are markedly effective particularly against insect pests belonging to LEPIDOPTERA, and COLEOPTERA and the like"<sup>4</sup> teaches away from a method for treating pests as claimed in independent claims 1, 15 and 16.

Furthermore, the examiner is directed to the Declaration of Dr. Hassan Oloumi-Sadeghi, which was filed on April 11, 2006 along with the response to the Office action of November 16, 2005. This declaration explained how Takagi et al. was unsuited to suggest the methods of the present application, because the reference discloses hydrazinecarboxamide derivatives which are generic to the hydrazine compound of the present claims (formula I-1), and that Takagi et al.'s teaching with regard to the insecticidal activity of the generic compounds was too general to suggest that any particular group of compounds within the genus exhibit noteworthy effects on specific pests.

The examiner has admitted that "ant[s] and termite[s] are not specifically addressed."<sup>5</sup> The examiner's admission is true, but does not go far enough; none of the insect orders or families addressed in the claims are addressed in the reference. Again, anticipation under 35 U.S.C. §102 can be found only if a reference shows exactly what is claimed.<sup>6</sup> Yet, the examiner, has relied on the passage in column 63, lines 7 to 22, wherein Takagi et al. mention the possibility of applying the hydrazinecarboxamides I to certain substrates such as, for example, trees, soil, the inside of a house or ditches around a house, and has argued that "the method steps ... the application sites ... and rates are those of the instant claims, and must result in the same control...."<sup>7</sup> The examiner has erred, because "[i]n relying upon the theory of inherency, the examiner must provide a

<sup>4</sup> Column 62, line 67 to column 63, line 2 of US 5,543,573.

<sup>5</sup> Page 3, line 7 of the present Office action.

<sup>6</sup> Cf. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985); *In re Marshall* 577 F.2d 301, 198 USPQ 344 (CCPA 1978); *In re Kalm* 378 F.2d 959, 154 USPQ 10 (CCPA 1967).

<sup>7</sup> Page 3, lines 7 – 12 of the present Office action.

basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.”<sup>8</sup>

Indeed, “[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.”<sup>9</sup> It is well-settled that “[t]o establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’”<sup>10</sup>

The examiner has stated that “the method steps … the application sites … and rates are those of the instant claims, and must result in the same control....”<sup>11</sup> To the contrary, the “same control” will not necessarily result, but is, at best, merely possible. By utilizing the method disclosed by Takagi et al., one might by happenstance apply an effective amount of a hydrazine compound as claimed to a pest as claimed. However, this mere possibility is not enough to support a proper rejection under 35 U.S.C §102 or 103. The examiner is respectfully directed to MPEP §2112.

The examiner’s rationale for maintaining the rejection despite the reference’s failure to show exactly what is claimed is, therefore, in error. The rejection should be withdrawn. Favorable action is solicited.

#### Regarding the Rejections under 35 U.S.C. §103:

Claims 1, 10, 13 – 47 stand rejected under 103(a) over Stefferud<sup>12</sup> in view of Takagi et al. This rejection is in error, because “[t]o establish a *prima facie* case of obviousness ... the prior art reference (or references when combined) must teach or suggest all the claim limitations.”<sup>13</sup>

<sup>8</sup> Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

<sup>9</sup> In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

<sup>10</sup> In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

<sup>11</sup> Page 3, lines 7 – 12 of the present Office action.

<sup>12</sup> Stefferud, ed., INSECTS – the year book of agriculture, p 469, (1952).

<sup>13</sup> MPEP §2143.

- The cited references fail to teach or suggest all the limitations of claim 1, because the cited references do not teach a method for controlling a pest selected from the Isoptera, Hymenoptera, Orthoptera and Psocoptera orders which comprises applying to said pest or to a wooden part or to soil in the habitat of said pest an effective amount of a hydrazine compound of formula (I-1).
- The cited references fail to teach or suggest all the limitations of claim 15, because the cited references do not teach a method for protecting houses or an article selected from construction materials, furniture, leather, fibers, vinyl articles, electronic wires and cables against a pest selected from the Rhinotermitidae, Termitidae, Kalotermitidae and Termopsidae families, which comprises applying an effective amount of a hydrazine compound of formula (I-1) ... to said pest, a habitat or a nest of said pest, to a place at which occurrence of said pest is expected or to the article.
- The cited references fail to teach or suggest all the limitations of claim 16, because the cited references do not teach a method for controlling a pest from the Formicidae family in crops, which comprises applying an effective amount of a hydrazine compound of formula (I-1) ... to said pest, to said crops, to soil surrounding said crops or to a nest of said pest.

The examiner has alleged that the limitations of these claims are inherently disclosed by Takagi et al., however as discussed above, the alleged inherency has not been established. The claim limitations do not necessarily flow from the teachings of Takagi et al.

Of course, the examiner has also cited Stefferud, to allege that it provides a definition of the term “household insects.” According to the examiner, Stefferud’s definition of “household insects” includes

“termites, ants, ... beetles, such as powder post beetles, ... lice, mites, [and] flies which damage buildings and wood furniture, clothing, rugs, [and] upholstery.”<sup>14</sup>

Assuming for the sake of argument that the examiner’s interpretation of Stefferud is accurate, the reference, at best, teaches that many types of insects could be labeled as “household insects.” Next, the examiner assumes that Stefferud’s “household insects” would probably be in the locations where the Takagi et al. formulation is to be applied,

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<sup>14</sup> Page 3, lines 32 – 34 of the present Office action.

i.e., "trees, fields, inside of houses & ditches around houses." Again, "[i]nherency ... may not be established by probabilities or possibilities."<sup>15</sup> Any conclusion that the Takagi et al. method would inherently be effective against the "household insects" listed by Stefferud is in error. Indeed, it should be readily apparent that a specific insecticide is not necessarily effective against all insects that can possibly or would probably occur in a given location. For at least these reasons, the present rejection is in error and should be withdrawn. Favorable action is respectfully solicited.

Claims 1, 10, 13 – 47 stand rejected under 103(a) over Treacy et al. in view of Takagi et al. and Stefferud. The teaching of Treacy et al. addresses an insecticidal composition<sup>16</sup> which comprises synergistically effective amounts of a neuronal sodium channel antagonist which *inter alia* encompasses compounds as represented by applicants' formula (I-1), and an arylpyrrole. Treacy et al. provide that this binary composition is effective against a wide variety of lepidopteran and coleopteran insects such as cotton bollworm, tobacco budworm, potato beetle and corn rootworm and the like.<sup>17</sup> However, Treacy et al. merely contemplate the possibility that their synergistic binary composition itself "may be useful"<sup>18</sup> to control cockroaches, ants, termites or the like. Thus, Treacy et al. fail to show: a method, as claimed in claim 1, for controlling a pest selected from the *Isoptera, Hymenoptera, Orthoptera and Psocoptera orders* which comprises applying to said pest or to a wooden part or to soil in the habitat of said pest an effective amount of a certain hydrazine compound as is represented by applicants' formula (I-1) which specifically requires for Y being 1 to 5 of the same or different substituents selected from the group consisting of nitro and cyano;<sup>19</sup> a method, as claimed in claim 15, for protecting houses or an article selected from construction materials, furniture, leather, fibers, vinyl articles, electronic wires and cables against a pest selected from the Rhinotermitidae, Termitidae, Kalotermitidae and Termopsidae families, which comprises applying an effective amount of a hydrazine compound of formula (I-1) which specifically requires for Y being 1 to 5 of the same or different substituents selected from

<sup>15</sup> In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

<sup>16</sup> Cf. col. 1, indicated lines 61 to 67, of **US 6,342,518**.

<sup>17</sup> Cf. col. 7, indicated lines 26 to 31, of **US 6,342,518**.

<sup>18</sup> Cf. col. 7, indicated line 32, of **US 6,342,518**.

<sup>19</sup> Cf. applicants' Claims 1, 10, 13 and 14. Cf. also applicants' new Claims 18 to 27 which depend upon Claim 1.

the group consisting of nitro and cyano, to said pest, a habitat or a nest of said pest, to a place at which occurrence of said pest is expected or to the article;<sup>20</sup> or a method, as claimed in claim 16, for controlling a pest from the *Formicidae family* in crops, which comprises applying an effective amount of a certain hydrazine compound as is represented by applicants' formula (I-1) which specifically requires for Y being 1 to 5 of the same or different substituents selected from the group consisting of nitro and cyano, to said pest, to said crops, to soil surrounding said crops or to a nest of said pest.<sup>21</sup>

The examiner's proposed combination with the teachings of Takagi et al. and Stefferud fail to compensate for these shortcomings. The Takagi et al. reference shares the shortcomings of Treacy et al. and, as discussed above, Stefferud cannot be used to establish the inherency of the present invention, because contrary to the examiner's implicit assertion, a specific insecticide is not necessarily effective against all insects that can possibly or would probably occur in a given location.

For at least these reasons, the present rejection is in error and should be withdrawn. Favorable action is respectfully solicited.

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<sup>20</sup> Cf. applicants' Claim 15 also applicants' new Claims 38 to 47 which depend upon Claim 15.

<sup>21</sup> Cf. applicants' Claims 16 and 17. Cf. also applicants' new Claims 38 to 47 which depend upon Claim 16.